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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/966,538	09/26/2001	Guy Riddle	6533/53640	4598

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EXAMINER	
WU, QING YUAN	
ART UNIT	**PAPER NUMBER**
2194	

DATE MAILED: 01/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/966,538	RIDDLE, GUY	
	Examiner	Art Unit	
	Qing-Yuan Wu	2194	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *11/17/05*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-27* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-27* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-27 are pending in the application.

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11/17/05 has been entered.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 10-11, 13-14, 17-19, and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Martin (U.S. Patent 6,154,776), in view of Chawla et al. (hereafter Chawla) (U.S. Patent 6,771,661).

5. Chawla was cited in the last office action.

6. As to claim 11, Martin teaches the invention substantially as claimed including a computer implemented method allowing dynamic allocation of a network resource, the method comprising the steps of:

recognizing a new user of a network resource based on one or more attributes of at least one packet in a data flow [Martin, abstract; col. 3, lines 35-38; col. 3, line 60-col. 4, line 5 and lines 52-56];

creating a partition on demand for the new user, wherein the partition is operable to allocate utilization of the network resource across all data flows corresponding to the new user [Martin, col. 2, lines 7-13; col. 4, lines 13-32; col. 10, line 4].

7. Martin does not specifically teach disposing of the partition when no longer needed. However, Martin disclosed resource limitation [Martin, col. 3, line 11]. In addition, Chawla disclosed releasing formerly reserved bandwidth resources that are no longer required [Chawla, col. 3, lines 4-12].

8. It would have been obvious to one of an ordinary skill in the art at the time the invention was made, to have combined the teaching of Martin with the teaching of Chawla because the teaching of Chawla would further enhance the resource management mechanism of Martin by releasing unused resources due to resource limitation.

9. As to claim 13, Martin as modified teaches the invention substantially as claimed including wherein receiving a set of parameters defining a partition [Martin, col. 2, lines 21-29; col. 3, lines 46-65; col. 9, lines 20-23; Chawla, col. 3, lines 30-34, lines 54-58; Fig. 2].

10. As to claim 14, Martin as modified teaches the invention substantially as claimed including wherein the partition is configurable based on a characteristic of the user's utilization of the network resource [Chawla, col. 3, lines 30-34, 54-58; col. 20, lines 21-26].

11. As to claim 17, Martin as modified does not specifically teach wherein the partition is implemented by class-based weighted fair queuing (hereafter CBWFQ) functionality. However, Chawla disclosed weighted fair queuing (hereafter WFQ) algorithm to dequeue data from various queues [Chawla, col. 5, lines 40-45], and different levels of service for different dataflow [Chawla, col. 2, lines 24-30]. It would have been obvious to one of an ordinary skill in the art at the time the invention was made, to have extended the functionality of WFQ to provide support for user-defined traffic classes.

12. As to claim 18, Martin as modified does not specifically teach wherein the partition is implemented by committed access rate functionality (hereafter CAR). However, Martin disclosed Quality of Service [Martin, abstract], in addition the functionality of rate limiting in bandwidth management is well known in the art, in addition, Chawla disclosed different levels of service for different dataflow [Chawla, col. 2, lines 24-30].

13. As to claim 19, this claim is rejected for the same reason as claim 11 above.

14. As to claim 10, this claim is rejected for the same reason as claim 11 above. In addition, Martin as modified teaches a partition management module operative to dynamically create partitions [Martin, col. 4, lines 13-29; Chawla, abstract, lines 1-5; col. 2, lines 52-67]; and,

a partitioning mechanism operative to enforce the partitions to control access to a network resource among a plurality of users [Martin, col. 5, lines 64-66; Chawla, col. 2, lines 17-30].

parameter for managing aggregate bandwidth across all data flows corresponding to a given user [Martin, col. 9, line 65-col. 10, line 9].

15. As to claim 26, this claim is rejected for the same reason as claims 10-11, and 13 above. In addition, Martin as modified teaches associating a traffic classification to the data flow, wherein traffic classification determines the parameters of the partition [Martin, col. 11, lines 50-56; Chawla, col. 2, lines 24-30].

16. Claims 15-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Martin and Chawla as applied to claim 11 above, in view of Applicant Admitted Prior Art (hereafter AAPA).

17. As to claims 15-16, Martin and Chawla do not specifically teach wherein the partition is operable to provide a minimum allocation of the network resource to the new user, and limit

utilization of the network resource. However, Martin disclosed Quality of Service [Martin, abstract]. However, AAPA teaches partitioning bandwidth in which partitions ensure a minimum and/or cap bandwidth to a particular class of traffic such as data flows involving a specific user [AAPA, pg. 4, lines 13-20].

18. It would have been obvious to one of an ordinary skill in the art at the time the invention was made, to have combined the teaching of Martin and Chawla with the teaching of AAPA because the teaching of AAPA would improve the teaching of Martin and Chawla by providing specific limitation to resource usage/allocation.

19. Claims 1-9, 12, 20-22, 25, and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Martin and Chawla as applied to claims 10, 11, 19 and 26 above, in view of Eisler et al (hereafter Eisler) (U.S. Patent 6,128,713).

20. Eisler was cited in the last office action.

21. As to claim 12, Martin and Chawla do not specifically teach wherein the disposing step comprises the steps of reclaiming the partition for a subsequent new user if the partition is inactive. However, Chawla disclosed releasing reserved resource that are no longer required and allowing these resource to be used for transfer of other data [Chawla, col. 3, lines 9-12]. In addition, Eisler teaches freeing up memory based on least recently used algorithm [Eisler, col. 4, lines 61-64; col. 14, lines 24-29]. It would have been obvious to one of an ordinary skill in the

art at the time the invention was made, to have combined the teaching of Martin, Chawla and Eisler because the teaching of Eisler would allow more efficient re-used of resources by reallocating least active used resource for subsequent uses.

22. As to claim 20, this claim is rejected for the same reason as claims 11 and 12 above.

23. As to claim 21, this claim is rejected for the same reason as claim 20 above. In addition, Martin, Chawla and Eisler teach reclaiming partition when necessary [Eisler, col. 14, lines 30-33].

24. As to claim 22, this claim is rejected for the same reason as claim 21 above.

25. As to claim 25, this claim is rejected for the same reason as claims 19 and 21 above. In addition, Martin, Chawla and Eisler teach a partition object space [Chawla, col. 8, lines 51-53; 400, Fig. 6], monitoring use of the partitions [Martin, col. 9, lines 9-16; Chawla, col. 7, lines 42-44; col. 8, lines 57-63].

26. As to claim 27, this claim is rejected for the same reason as claim 12 above.

27. As to claim 1, this claim is rejected for the same reason as claims 10-11, and 25 above. In addition, Martin, Chawla and Eisler teach at least one user partition object having at least one

attribute defining an allocation of a network resource to a user [Chawla, 191, Fig. 2; Fig. 5; col. 3, lines 54-61].

28. As to claims 2-5, these are apparatus claims for performing the method claims 12 and 21. Therefore, they are rejected for the same reason as claims 12 and 21 above.

29. As to claims 6-7, these claim are rejected for the same reason as claim 1 above.

30. As to claims 8-9, these claims are rejected for the same reason as claims 1-2 and 6 above.

31. Claims 23-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Martin, Chawla and Eisler as applied to claims 13 and 20 above, further in view of Gold et al (hereafter Gold) (U.S. PG Pub 20020194326).

32. Gold was cited in the last office action.

33. As to claim 23, this claim is rejected for the same reason as claim 13 above. In addition, Martin, Chawla and Eisler do not specifically teach receiving a partition cap parameter defining a desired limit on the number of user partitions; and wherein the creating step is conditioned on the number of existing user partitions not exceeding the partition cap. However, Gold teaches preventing too many users from consuming a resource by limiting the number of user access [Gold, pg. 1, paragraph 8, lines 9-14; pg. 1, paragraph 9; pg. 3, paragraph 50, lines 4-14]. It

would have been obvious to one of an ordinary skill in the art at the time the invention was made, to have combined the teaching of Martin, Chawla and Eisler with the teaching of Gold because the teaching of Gold guarantee that the number of users/requests will not exhaust the limited among of resources available.

34. As to claim 24, Martin, Chawla, Eisler and Gold do not teach defining an overflow partition; and assigning new users to the overflow partition, if the number of user partitions exceeds the partition cap. However, Chawla disclosed the needs of more bandwidth and modifying the amount of bandwidth allocated to the session on data communications [Chawla, col. 5, lines 11-15; col. 6, lines 54-58], releasing reserved resource that are no longer required and allowing these resource to be used for transfer of other data [Chawla, col. 3, lines 9-12], and Gold disclosed when new user capacity limit is exceeded, temporarily allowing a new user onto the computer entity [Gold, pg. 5, paragraph 73]. It would have been obvious to one of an ordinary skill in the art at the time the invention was made, to assign new user exceeding the cap separately rather than rejecting the new user until there is enough resource for a guarantee quality of service.

Response to Arguments

35. Applicant's arguments filed 11/17/05 have been fully considered but they are not persuasive.

36. In the remarks, Applicant argued in substance that:

a. Combination of Chawla and AAPA does not teach or suggest the claimed invention involving the dynamic recognition of new users based on the packets of the data flows.

b. References do not teach cap on the number of users that can be assigned a user partition.

c. References do not teach use of overflow partitions when a cap has been exceeded.

d. Gold does not teach a dynamic system, a system that reclaims partitions associated with inactive users for use by subsequent new users.

e. The use of four references to allegedly achieve the claimed inventions suggests that the Examiner has engaged in impermissible hindsight reconstruction.

f. The cited prior art does not teach the use of overflow partitions into which user data flows could be placed when more that 1000 students concurrently accessed the network.

37. Examiner respectfully traversed Applicant's remarks:

38. As to points (a) and (c), applicant's arguments with respect to these limitations are mooted in view of the new ground of rejection.

39. As to point (b), please see rejection of claim 23 above.

40. As to point (d), Martin and Chawla teach a dynamic system [Martin, abstract; Chawla, abstract], in addition, Martin, Chawla and Eisler teach a system that reclaims partitions associated with inactive users for use by subsequent new users [see claim 12 above], in combination the examiner believed the above limitation have been met. In addition, applicant cannot individually address the reference used to reject the claims. Applicant cannot show nonobviousness by attacking the references individually where, as here, the rejection is based on a combination of references. See In re Keller, 208 USPQ 871 (CCPA 1981).

41. As to point (e), in response to applicant's argument that the used of four references suggest improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper.

42. As to point (f), Applicant's claimed invention does not support applicant's arguments. Claimed subject matter, not the specification, is the measure of invention. Limitations in the

specification cannot be read into the claims for the purpose of avoiding the prior art. If Applicant believes the limitation is important feature of the invention, it should be incorporated into the claims for further consideration. In re Self, 213 USPQ 1,5 (CCPA 1982); In re Priest, 199 USPQ 11,15 (CCPA 1978).

43. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Qing-Yuan Wu whose telephone number is (571) 272-3776. The examiner can normally be reached on 8:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Thomson can be reached on (571) 272-3718. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Qing-Yuan Wu

Examiner

Art Unit 2194

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